

Serial No. 09/597,315
Banks et al.
Case No. CE08314R

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An apparatus for interfacing a communication network to a feature server external to the network, the apparatus comprising:
a service delivery element, wherein the service delivery element is within the communication network, coupled to the communication network and a feature server external to the network, the service delivery element comprising at least one internal interface to couple the service delivery element to other devices within the communication network, an external interface to couple the service delivery element to at least one feature server external to the communication network, an embedded security layer to authenticate the at least one feature server on the communication network and a processor adapted to operate responsive to a control program stored within a memory associated with the processor; and wherein the service delivery element is operable to recognize the feature server, to negotiate a security level between the feature server and the communication network, and to manage access by the feature server to the communication network.
2. (Previously Presented) The apparatus of claim 1, wherein the security level defines a level of access of the feature server to the communication network.
3. (Previously Presented) The apparatus of claim 1, wherein, based upon the security level, the service delivery element restricts access by the feature server to at least one class of data retained within the communication network.
4. (Previously Presented) The apparatus of claim 1, wherein, based upon the security level, the service delivery element restricts access by the feature server to at least one internal function of the communication network.
5. (Previously Presented) The apparatus of claim 1, wherein based upon the security level, the service delivery element terminates access by the feature server.

Serial No. 09/597,315
Banks et al.
Case No. CE08314R

6. (Previously Presented) The apparatus of claim 1, wherein the service delivery element provides scalable levels of access to the communication network by the feature server.
7. (Previously Presented) The apparatus of claim 1, wherein the service delivery element includes restriction criteria associated with varying degrees of authorization to the communication network by the feature server.
8. (Original) The apparatus of claim 7, wherein the restriction criteria comprises one of user based privileges and network operation variables.
9. (Original) The apparatus of claim 1, wherein the service delivery element is operable to provide one of access control, connectionless integrity, data origin authentication, replay packet rejection and confidentiality services.
10. (Original) The apparatus of claim 1, wherein the service delivery element includes a tunnel communication mode.
11. (Original) The apparatus of claim 10, wherein the tunnel communication mode comprises of an IP security protocol tunnel mode.
12. (Previously Presented) The apparatus of claim 1, wherein the service delivery element is configured to recognize a particular feature server.
13. (Cancelled)
14. (Previously Presented) The apparatus of claim 1, wherein the service delivery element establishes a security layer between the communication network and the feature server.

Serial No. 09/597,315
Banks et al.
Case No. CE08314R

15. (Previously Presented) The apparatus of claim 1, wherein the service delivery element is operable to establish one of a static association and a dynamic association between the feature server and the communication network.
16. (Previously Presented) The apparatus of claim 1, wherein the service delivery element is operable to establish both a static association and a dynamic association between the feature server and the communication network at the same time.
17. (Previously Presented) The apparatus of claim 1, wherein the service delivery element is operable to provide an action responsive to the security level.
18. (Original) The apparatus of claim 17, wherein the action comprises one of creating a usage accounting record and providing a message.
19. (Previously Presented) The apparatus of claim 1, wherein the service delivery element is operable to expand access to the communication network by the feature server.
20. (Previously Presented) The apparatus of claim 19, wherein the service delivery element expands access to the communication network by the feature server subsequent to a renegotiation of the security level.
21. (Previously Presented) The apparatus of claim 1, wherein the service delivery element comprises a translation function.
22. (Currently Amended) A method of interfacing a communication network to a feature server external to the network comprising the steps of:
providing a service delivery element ~~coupled between the communication network and the~~ wherein the service delivery element being within the communication network

Serial No. 09/597,315
Banks et al.
Case No. CE08314R

and having an internal interface to couple the service delivery element to other elements within the communication network, an external interface to couple the service delivery element to the feature server external to the network and an embedded security layer,

recognizing the feature server via the service delivery element,

authenticating the feature server for use on the communication network by an embedded security layer,

negotiating a security level between the feature server and the communication network, and

metering access via the service delivery element by the feature server to the communication network in view of the security level.

23. (Previously Presented) The method of claim 22, wherein the security level defines a level of access of the feature server to the communication network.

24. (Previously Presented) The method of claim 22, wherein the method comprises, based upon the security level, restricting access by the feature server to at least one class of data retained within the communication network.

25. (Previously Presented) The method of claim 22, wherein the method comprises, based upon the security level, restricting access by the feature server to at least one internal function of the communication network.

26. (Previously Presented) The method of claim 22, wherein the method comprises, based upon the security level, terminating access to the communication network by the feature server.

27. (Previously Presented) The method of claim 22, further comprising scaling levels of access to the communication network by the feature server.

Serial No. 09/597,315
Banks et al.
Case No. CE08314R

28. (Previously Presented) The method of claim 22, wherein the service delivery element includes restriction criteria, and wherein the method comprises varying degrees of authorization to the communication network by the feature server in view of the restriction criteria.
29. (Original) The method of claim 28, wherein the restriction criteria comprises one of user based privileges and network operation variables.
30. (Previously Presented) The method of claim 22, the method comprising tunneling data between the feature server and the communication network through the service delivery element.
31. (Previously Presented) The method of claim 22, wherein the step of recognizing a feature server comprises recognizing a particular feature server.
32. (Previously Presented) The method of claim 22, comprising establishing a security layer between the communication network and the feature server.
33. (Previously Presented) The method of claim 22, comprising establishing one of a static association and a dynamic association between the feature server and the communication network.
34. (Original) The method of claim 22, comprising, in response to a failure to negotiate a security level, providing an action responsive to the failure to negotiate a security level.
35. (Original) The method of claim 34, wherein the action comprises one of creating a usage accounting record, providing a recorded message and linking to a source of additional information.

Serial No. 09/597,315
Banks et al.
Case No. CE08314R

36. (Previously Presented) The method of claim 22, comprising expanding access to the communication network by the feature server.
37. (Previously Presented) The method of claim 22, wherein the step of expanding access to the communication network by the feature server comprises renegotiating the security level.
38. (Previously Presented) The method of claim of claim 22, further comprising the step of translating data communicated between the feature server and the communication network.